Flexible system communication

for monitoring your electrical installations



Design the future of energy



Flexible system communication Everything in view

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Perfect system overview through fast information exchange and flexible integration of devices

Keep an eye on the system state of your electrical installation: The communication solutions from Bender use a condition monitor and can be integrated into the existing IT structure. This is done via integrated interfaces and offers the flexibility to integrate third-party devices into the system along with the Bender devices.

The web interface makes checking and setting measured values, parameters and all other data simple and intuitive. It can be used to report and visualise alarms and to generate individual overview pages using the visualisation application.



Schematic overview



Convincing advantages of the Bender interfaces

BMS

BMS stands for Bender measuring device interface. It is an RS-485 interface with a protocol which has been especially developed for Bender devices. The BMS bus cyclically transmits alarm and operating messages. In addition, the protocol contains commands for querying and changing device parameters as well as various control commands. BMS is a proprietary bus that does not allow any other communication on the 2-wire line.

BCOM

BCOM is a protocol for the communication of Bender devices via an IP-based network. Communication is based on standard Ethernet hardware, TCP/IP or UDP/IP protocol and other standardised network services. The Bender devices can communicate in parallel with the office communication and use the same infrastructure. BCOM does not restrict other standard communication on the same network.





High level of integration of various BUS systems and protocols



Tip: Future devices can be configured and read out via the Bender Connect app. Click here for more information.



Multiple communication interfaces



POWERSCOUT® Maximum transparency for your electrical installation

Moisture, deterioration, dirt, mechanical damage or faults due to the impact of current, voltage and temperature cause malfunctions in every electrical installation. The web-based software solution POWERSCOUT® helps you detect these at an early stage and eliminate the causes in an economically reasonable way. This guarantees a high safety level for the installation as well as high operational reliability, and it reduces costs.

Analysis – as individual as your installation – as simple as possible

Predictive maintenance prevents downtimes, reduces costs and staff deployment. POWERSCOUT® informs you about the condition of your electrical installation at all times, since the meaningful visualisations with flexible dashboards can be retrieved via any display device: be it a smartphone, a laptop or a PC. On request, POWERSCOUT® will send you these graphically processed reports at specified intervals.

Continuous monitoring

Manual data acquisition is time consuming, error-prone and only provides random results. POWERSCOUT® gives you an insight into the entire data of your installation at any time, since all measured values are automatically and continuously saved. Your data is stored reliably and remains available for years.

Basis for periodic verification as per IEC 60364-6

The automated POWERSCOUT® report on residual currents forms the basis for measuring without switch-off by means of periodic verification as per IEC 60364-6. In order to maintain the correct status for electrical installations and stationary electrical equipment, periodic verification must be carried out.

This can be ensured, for example, when the installation is monitored continuously by qualified personnel. In this case, it is a smart move to rely on continuous monitoring with multi-channel residual current monitoring systems (RCMS) and an evaluation adapted to the installation (COMTRAXX[®] series). The automatic POWERSCOUT[®] reports based on this monitoring make it easier for the qualified person in charge to adjust the times when the insulation test shall be performed as part of the periodic verification.

Analysis

- Continuously recording insulation values
- Recognising correlations and optimising processes
- Cross-plant evaluation options
- Access from any location
- Support for investment decisions

Report

- Historical comparisons
- Reliable storage of measured values
- Event and alarm statistics

Predictive maintenance

- Higher availability
- Continuous monitoring
- Early detection of gradually developing insulation faults
- Early detection and reporting of short-time insulation degradation
- Lower costs incurred due to unexpected malfunctions and shutdowns

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